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EXAMINER	
CONTEE, JOY KIMBERLY	
ART UNIT	**PAPER NUMBER**
2686	4

DATE MAILED: 07/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

4

Office Action Summary	Application No.	Applicant(s)	
	09/993,513	KRAFT ET AL.	
	Examiner	Art Unit	
	Joy K Contee	2686	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 November 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-41* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-41* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11/27/01* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-4,6,8,9,11-19,21,23,24,26-33,35,37,38,40 and 41 are rejected under 35 U.S.C. 102(e) as being anticipated by Schroeder et al. ("Schroeder"), U.S. Patent No. 6,405,060.

Regarding claim 1, Schroeder discloses a method of handling the input of words into a text string in a communication terminal, comprising steps of:

inherently recording (i.e., reads on user input is entered in keypad and recorded for look-up) a key stroke sequence inputted for characterizing one of said words (col. 6,lines 31-38);

comparing said key strokes sequence with candidates in a word completion directory in order to find word completion candidates matching said key stroke sequence (col. 6,lines 31-49);

displaying one of said matching word completion candidates in the display for selection by the user (col. 6,lines 31-49); and

adding a word selected by the user to said directory including a plurality of word completion candidates, if the selected word exceeds a first predetermined number of characters, and if this word is not present there already (col. 7,lines 31-55).

Regarding claim 2, Schroeder discloses the method according to claim 1, wherein the candidates in the word completion directory comprises a plurality text strings each consisting of a plurality of individual words and derived from text messages stored in the communication terminal (col. 5,lines 46-55).

Regarding claim 3, Schroeder discloses the method according to claim 2, wherein the user, when the candidate consisting of a text string consisting of a plurality of individual words, selects the candidate word by word (col. 5,line 61 to col. 6,line 14).

Regarding claim 4, Schroeder discloses the method according to claim 2, wherein the user, when the candidate consisting of a text string consisting of a plurality of individual words, selects all the words in the text string of the candidate (col. 5,line 61 to col. 6, line 14).

Regarding claim 6, Schroeder discloses the method according to claim 1, wherein the word completion candidates in the word completion directory are searched for matches, when the number of key strokes to be interpreted exceeds a second predetermined number of key strokes (col. 6,lines 56-67 and col. 7,lines 10-13).

Regarding claim 8, Schroeder discloses the method according to claim 1, wherein the first predetermined number of keystrokes is two (col. 6,lines 56-61).

Regarding claim 9, Schroeder discloses a character entry application according to claim 2, respectively, wherein the plurality of text strings each consisting of a plurality of words is searched when a third number of key strokes has been entered for the entire text string (col. 5,lines 61 to col. 6, line 14).

Regarding claim 11, Schroeder discloses the method according to claim 1, wherein the word completion directory contains words being entered by the user by means of a text editor during a plurality of different sessions (col. 5,lines 45-55).

Regarding claim 12, Schroeder discloses the method according to claim 11, wherein the word completion directory contains words being entered by the user in a previously terminated message writing session (col. 5,lines 45-55).

Regarding claim 13, Schroeder discloses the method according to any of the claims 1-12, wherein the key strokes sequence is inputted to a predictive search engine outputting matches matching an ambiguous string of key strokes (col. 5,lines 19-45).

Regarding claim 14, Schroeder discloses a character entry application for use in a communication terminal for entering a text string for use in text applications, and comprising:

text entry keys for entering a key stroke sequence inputted for characterizing a character string; a word completion directory; means for recording the inputted key stroke sequence; means for comparing the inputted

key strokes sequence with candidates in the word completion directory in order to find word completion candidates matching the inputted key stroke sequence;a display for displaying one of said matching word completion candidates; means for selecting the displayed one of said matching word completion candidates; and means for adding a selected word to said directory including a plurality of word completion candidates, if the selected word exceeds a first predetermined number of characters, and if this word is not present there already (col. 6,line 31 to col. 7,line 55).

Regarding claim 15, Schroeder discloses a character entry application according to claim 14, and furthermore comprising a predictive search engine to which the recorded key strokes sequence is inputted, and wherefrom matches matching an ambiguous string of key strokes is outputted in response to the inputted recorded key strokes sequence (col. 4,lines 36-44).

Regarding claim 16, Schroeder discloses a character entry application according to claim 14, wherein the character entry application provides matches matching a string of non-ambiguous keystrokes inputted as the recorded keystrokes sequence (col. 5,lines 19-45).

Regarding claim 17, Schroeder discloses a character entry application according to claim 14, wherein the candidates in the word completion directory comprises a plurality text strings each consisting of a plurality of individual words and derived from text messages stored in the communication terminal (col. 5,lines 46-55).

Regarding claim 18, Schroeder discloses a character entry application according to claim 17 and comprising selection means by means of which the user selects the candidate word by word, when the candidate consisting of a text string consists of a plurality of individual words (col. 5,line 62 to col. 6, line 19).

Regarding claim 19, Schroeder discloses a character entry application according to claim 17, and comprising selection means by means of which the user selects all the word in the text string of the candidate, when the candidate consists of a text string consisting of a plurality of individual words (col. 5,line 62 to col. 6, line 19).

Regarding claim 21, Schroeder discloses a character entry application according to claim 14, wherein the word completion candidates in the word completion directory are searched for matches, when the number of key strokes to be interpreted exceeds a second predetermined number of key strokes (col. 6,lines 56-61).

Regarding claim 23, Schroeder discloses a character entry application according to claim 14, wherein the first predetermined number of keystrokes is two (col. 6,lines 56-61).

Regarding claims 24 and 38, Schroeder discloses a character entry application according to claims 17 and 31, respectively, wherein the plurality of text strings each consisting of a plurality of words is searched when a third number of key strokes has been entered for the entire text string (col. 5,lines 61 to col. 6, line 14).

Regarding claim 26, Schroeder discloses a character entry application according to claim 14, wherein the word completion directory contains words that are entered by the user by means of a text editor during a plurality of different sessions (col. 5,lines 46-55 and col. 7, lines 30-41).

Regarding claim 27, Schroeder discloses a character entry application according to claim 26, wherein the word completion directory contains words being entered by the user in a previously terminated message writing session (col. 5,lines 46-55 and col. 7, lines 30-41).

Regarding claim 28, Schroeder discloses a communication terminal having character entry application for entering a text string for use in text applications, and comprising:

text entry keys for entering a key stroke sequence inputted for characterizing a character string; a word completion directory; means for recording the inputted key stroke sequence; means for comparing the inputted key strokes sequence with candidates in the word completion directory in order to find word completion candidates matching the inputted key stroke sequence; a display for displaying one of said matching word completion candidates; means for selecting the displayed one of said matching word completion candidates; and means for adding a selected word to said directory including a plurality of word completion candidates, if the selected word exceeds a first predetermined number of characters, and if this word is not present there already (col. 6,line 31 to col. 7,line 55).

Regarding claim 29, Schroeder discloses a communication terminal according to claim 28, and furthermore comprising a predictive search engine to which the recorded key strokes sequence is inputted, and wherefrom matches matching an ambiguous string of key strokes is outputted in response to the inputted recorded key strokes sequence (col. 5,lines 19-45).

Regarding claim 30, Schroeder discloses a communication terminal according to claim 28, wherein the character entry application provides matches matching a string of non-ambiguous keystrokes inputted as the recorded keystrokes sequence (col. 5,lines 46-55).

Regarding claim 31, Schroeder discloses a communication terminal according to claim 28, wherein the candidates in the word completion directory comprises a plurality text strings each consisting of a plurality of individual words and derived from text messages stored in the communication terminal (col. 5,lines 46-55).

Regarding claim 32, Schroeder discloses a communication terminal according to claim 31, and comprising selection means by means of which the user selects the candidate word by word, when the candidate consisting of a text string consists of a plurality of individual words (col. 5,line 62 to col. 6, line 14).

Regarding claim 33, Schroeder discloses a communication terminal according to claim 31, and comprising selection means by means of which the user selects all the word in the text string of the candidate, when the candidate consisting of a text string consists of a plurality of individual words (col. 5,line 61-col. 6,line 14).

Regarding claim 35, Schroeder discloses a communication terminal according to claim 28, wherein the word completion candidates in the word completion directory are searched for matches, when the number of key strokes to be interpreted exceeds a second predetermined number of key strokes (col. 6,lines 31-36 and lines 56-61).

Regarding claim 37, Schroeder discloses a communication terminal according to claim 28, wherein the first predetermined number of keystrokes is two (col. 6,lines 56-61).

Regarding claim 40, Schroeder discloses a communication terminal according to claim 28, wherein the word completion directory contains words being entered by the user by means of a text editor during a plurality of different sessions (col. 5,lines 46-55).

Regarding claim 41, Schroeder discloses a communication terminal according to claim 40, wherein the word completion directory contains words being entered by the user in a previously terminated message writing session (col. 5,lines 45-55).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 5, 20 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schroeder, in view of Yu, U.S. Patent No. 6,556,841

Regarding claims 5,20 and 34, Schroeder discloses a character entry application according to claims 1,17 and 28, but fails to disclose a select-key by means of which the user selects the first candidate word in the text string by pressing the select-key for a period shorter than a predetermined period of time, and the entire text string by pressing the select-key for a period longer than a predetermined period of time, when the candidate consisting of a text string consists of a plurality of individual words.

In a similar field of endeavor, Yu discloses a select-key by means of which the user selects a function by pressing the select-key for a period shorter than a predetermined period of time, and the entire text string by pressing the select-key for a period longer than a predetermined period of time (col. 1,line 55 to col. 2,line 7).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify Schroeder to include a time varying activation of a select key for the purpose of reducing the number of hard keys on a mobile unit as is known in the prior art.

5. Claims 7, 10,22,25,36 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schroeder.

Regarding claim 7,10,22,25,36 and 39 Schroeder discloses the method according to claim 6,9,21,9,35 and 9, respectively. Schroeder fails to specifically

disclose wherein the second (and/or third) predetermined number of keystrokes is four.

However, at the time of the invention it would have been obvious to one of ordinary skill in the art to modify Schroeder to include any specific number of characters "N" as user input to determine at least one candidate word from the dictionary tree (col. 6,lines 56-61).

Motivation for doing so would have been for the purpose of achieving a correct match from the direction tree, i.e., a case where multiple words begin with the same 4 letters, e.g., "threat" and "three".

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Armstrong III, U.S. Patent No. 5,671,426 discloses a method for organizing incremental search dictionary.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joy K Contee whose telephone number is 703-308-0149. The examiner can normally be reached on M (alternating), T & Th, 5:30 a.m. to 2:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on 703-305-4379. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Joy Contee

June 20, 2004

CHARLES APPIAH
PRIMARY EXAMINER